

ABSTRACT

A display system for creating a full-color projected image. Light from a white light source passes through a color modulator (106). The color modulator (106) is a stack of at least two dielectric layers exposed to an electric field. The applied electric field operates to change the index of refraction of the dielectric material enough to cause the stack of dielectric layers to selectively reflect or transmit various wavelength bands. By changing the electric field, the color modulator (106) provides a series of three primary color light beams that are modulated by a spatial light modulator (112). A controller (128) controls the operation of the spatial light modulator (112) to form an image bearing beam of primary colored light. The image bearing beam of light is focused onto an image plane by a projection optics (124).